

Kentucky Information Technology Standards (KITS)

[Full KITS Report - Word Search](#)

EAS Code	EAS Category Name	Standard	KITS Category Code	KITS Domain > Area > Category	KITS Description	Approved Products	Date
8100	Application Development Methodology and Software	Structured Analysis & Design - Commonwealth Office of Technology's Systems Development Life Cycle (SDLC) Methodology (COT-140) RUP: Rational Unified Processing: Implementing Features from RUP AND UML BASED design and analysis OOAD: Object Oriented Analysis and Design	B10.813.326	General Government > Support delivery of state services > IT System Development / Integration Support	IT System Development / Integration Support includes the software services enabling elements of distributed business applications to interoperate and the software development necessary to facilitate such integration. These elements can share function, content, and communications across heterogeneous computing environments.	Design/Analysis/Data Modeling: Design Tools: <ul style="list-style-type: none"> • Microsoft - Excel • Microsoft - Visio • Microsoft - Word • Rational Software Architect Data Modeling: <ul style="list-style-type: none"> • CA - ERwin Data Modeler Analysis/Design/Modeling Library: <ul style="list-style-type: none"> • Docushare *Not for new installations. • Microsoft Visual SourceSafe *Not for new installations. Mainstream support slated to end 7/10/2012; Extended Support slated to end 7/11/2017 <ul style="list-style-type: none"> • Microsoft Team Foundation Server Design Patterns: <ul style="list-style-type: none"> • GoF (Gang of Four) Patterns Extensibility Frameworks Developer Productivity Tool: <ul style="list-style-type: none"> • ReSharper 8 for Visual Studio Extension 	Effective: 7/1/1997 Revised: 6/17/2015 Reviewed: 6/17/2015

EAS Code	EAS Category Name	Standard	KITS Category Code	KITS Domain > Area > Category	KITS Description	Approved Products	Date
8200	Application Development Platform	<p>The Commonwealth of Kentucky has adopted a standard which mandates that every state agency developing or purchasing new departmental or enterprise applications must utilize one of the six application development platforms described below. Four of the platforms address legacy and traditional applications, while the final two platforms address applications intended for wireless and mobile platforms.</p> <p>Applications that will be accessed primarily via desktop or laptop computers must utilize one of the following five application development platforms, or a combination thereof.</p> <p>1.Windows DNA/COM+ Platform (not for new installations)(Distributed interNet Applications Architecture) Microsoft combined its Component Object Model + (COM+) Technologies into a single overarching platform called Windows DNA. The platform provides an overall architecture that includes Microsoft's formerly separate ActiveX, COM/DCOM, and other Microsoft component technologies. Classic ASP Applications Using IIS 5.0 below.</p> <p>2. Microsoft .NET Platform - the most recent topology of applications prescribed by Microsoft and implemented in most Microsoft development tools and runtime middleware. .NET includes the .NET Framework, a runtime multi-language application platform, and COM+, a transaction integrity extension to the Framework. .NET supports multiple programming models, including XML Web services, WebForms, WinForms and others:</p> <p>a. Biztalk</p> <p>3. IBM z/OS Platform (the z/OS and earlier MVS platforms were characterized by applications written in</p>	A02.022.240	Application Components > Development Environment and Tools > Integrated Development Environment	Software that provides comprehensive facilities to computer programmers for software development.	<p>For the .NET development environment: Comprehensive development suite for the .NET development environment:</p> <ul style="list-style-type: none"> • Telerik DevCraft DevTools • Infragistics Controls • Microsoft Visual Studio .NET, including: <ul style="list-style-type: none"> o Enterprise Architect 2010, 2008, 2005, & 2003* o Enterprise Developer 2010, 2008, 2005, & 2003* o Professional 2010, 2008, 2005, & 2003* <p>For the z/OS, UNIX, & J2EE environments:</p> <ul style="list-style-type: none"> • Eclipse • Hiperstation • Interactive Productivity Services Facility (ISPF) • Rational Application Developer • Rational Developer for z • Rational Software Architect for WebSphere Software • Rational Team Concert • Rational UrbanCode • Syncsort • Xceed Zip <p>For the JAVA development environment</p> <ul style="list-style-type: none"> • Spring Hibernate <p>Legacy tools for the Windows DNA/COM+ environment:</p> <ul style="list-style-type: none"> • Centura Team Developer • Enterprise COBOL for z/OS (IBM) • Job Control Language (JCL) • VB Scripts and Java Scripts • Visual Basic • Visual C++ • Visual J# • Visual Studio <p>Legacy tools for the z/OS, UNIX, & J2EE environments:</p> <ul style="list-style-type: none"> • C and C++ 	<p>Effective: 2/18/2009</p> <p>Revised: 7/24/2015</p> <p>Reviewed: 7/24/2015</p>

EAS Code	EAS Category Name	Standard	KITS Category Code	KITS Domain > Area > Category	KITS Description	Approved Products	Date
8200		<p>COBOL, or Telon, executing under one of the following environments, while possibly accessing QSAM, VSAM, IMS/DB or DB2 for data access)</p> <p>a. Batch Execution Environment – This environment is characterized by executing under control of JES (Job Entry Subsystem) with JCL (Job Control Language). These jobs are usually scheduled with CA-Scheduler. Programs execute as steps within these jobs and are developed with various languages (including Enterprise COBOL, HASM, SAS, etc.) that usually run under LE (Language Environment).</p> <p>b. IMS Subsystem – The IMS subsystem is a transaction monitor that executes programs as transaction within specified IMS transaction regions. Programs execute as transactions or subprograms and are developed with various languages (including Enterprise COBOL, HASM, etc.) that run under LE (Language Environment). Development in this environment is deprecated.</p> <p>c. CICS Subsystem – The CICS subsystem is a transaction monitor that executes programs as transactions. Programs execute as transactions or subprograms and are developed with various languages (including Enterprise COBOL, HASM, etc.) that run under LE (Language Environment). Development in this environment is deprecated.</p> <p>d. IBM Message Broker platform – This is the IBM Message Broker platform that runs with IBM WebSphere Application Server. This serves as an Enterprise Service Bus and acts as a broker for application integration. Software is developed using IBM Message Broker Toolkit within the Rational Application Developer Suite.</p> <p>4. UNIX Platform (the traditional UNIX platform is characterized by applications written in C or C+, executing on SUN or IBM UNIX servers,</p>				<ul style="list-style-type: none"> • Enterprise COBOL for z/OS • ISPF Dialog Management Facility • PKZip for MVS • REXX/CLIST • SAS (Statistical Analysis System) • Scheduler • Sybase Client ASE 15 • Syncsort • Telon Development Facility • VisualAge C++ • VisualAge COBOL *Not for new development. • Visual Age Enterprise Suite • WebSphere • Xpeditor (Compuware) <p>Data Access Tools:</p> <ul style="list-style-type: none"> • Aqua Data (DB2) • File-AID (IMS, DB2, RDX) • InSync (FILE) • Oracle SQL Developer • PL/SQL (Oracle) • SQL Server Management Studio • Progress DataDirect Shadow (DB2) • Query Management Facility (DB2) • SPUFI (DB2) • Squirrel (DB2) • TOAD (Oracle) • VSAM Assist (VSAM) <p>Reporting Tools</p> <ul style="list-style-type: none"> • See 2310 – Business Intelligence Software <p>Intelligence Software</p> <ul style="list-style-type: none"> • IBM SPSS • Report Distribution System (RDS) <p>Developer Support Tools:</p> <ul style="list-style-type: none"> • EditPlus • Gimp (graphics editor) • IBM Redbooks • Librarian • Microsoft Developer Network • Microsoft TechNet • Microsoft Visual SourceSafe Classic for (Microsoft Legacy Applications) CA-Librarian (z/os) 	

EAS Code	EAS Category Name	Standard	KITS Category Code	KITS Domain > Area > Category	KITS Description	Approved Products	Date
8200		<p>while accessing data stored in Oracle databases)</p> <p>5. Java 2 Platform, Enterprise Edition (Java EE) - a Sun Microsystems-sponsored architecture specification that prescribes application architecture for Java-based business applications. Java EE is implemented by multiple vendors and includes a J EE application server combined with Java EE message-orientated middleware.</p> <p>Programming models of Java EE include Java Server Pages, servlets, Session EJB and entity Enterprise JavaBeans.</p> <p>State agencies developing or purchasing new, wireless departmental or enterprise applications that will be accessed primarily via wireless phones and PDAs must utilize one of the following two application development platforms:</p> <p>1. Microsoft .NET Compact Framework - provides tools for developing mobile applications on Pocket PC devices and the Microsoft Smartphone.</p> <p>2. Java 2 Platform, Micro Edition (J2ME) - a version of Java that is defined by Sun Microsystems for use in devices such as mobile phones. J2ME is part of a set of related Java technologies that includes definitions of profiles and configurations for application developers.</p>				<ul style="list-style-type: none"> • Microsoft Windows Software Development Kit • Notepad++ • Notepad XML • PCO (Production Cutover) • Rational ClearCase (Source Control) • Junit • Log4J • Textpad • Toad-for-Oracle Other Tools: • Abend-Aid (Error Analysis) • CA Platinum • Compuware File-AID (z/os) • Compuware Xpediter (z/os debugging) • CSLA (.net Framework) • DataFlux • DB2 for z/os (Database Manager) • DCD III (COBOL Cross Ref/Documenter) • Dollar Universe • DynamicPDF Generator.NET • File-AID • FileMaker Pro • FxCOP (code walkthrough Microsoft) • IBM QMF/SPUFI • InSync • JCL Check (JCL Verification/Standardization) • Metalogix StoragePoint • Nunit (unit Test Microsoft) • PHIN MS • Program Analyzer (COBOL Source Analysis) • Qbase • Query Management Facility (QMF) • Rational Rhapsody • Resource Access and Control Facility (RACF) (System Security) • Spool Display Sysout Facility (SDSF) (Job Queue Access) • SPUFI 	

EAS Code	EAS Category Name	Standard	KITS Category Code	KITS Domain > Area > Category	KITS Description	Approved Products	Date
8200						<ul style="list-style-type: none">• Strobe/iStrobe (Z/OS Profiler)• ULS Viewer• VSAM Assist	

EAS Code	EAS Category Name	Standard	KITS Category Code	KITS Domain > Area > Category	KITS Description	Approved Products	Date
8300	Application Development Quality Management Software	<p>Application Development Quality Management Software tools provide features to assist in testing activities such as: load/stress testing, functional/regression testing, requirements traceability and security assessments.</p> <p>Need a limited product set for: economies-of-scale with respect to procurement, skills transferability required by a mobile workforce, data interchange between state government agencies, skills requirements for a competency team development environment.</p> <p>Approved Standards:</p> <ul style="list-style-type: none"> • International Organization for Standardization (ISO) • Compliance with Section 502, WCAG 1.0, WCAG 2.0, CLF, XAG Standards <p>Technical and Implementation Considerations:</p> <p>The advent of service-oriented architecture (SOA), increasing complexity and more regulations are renewing the focus on raising quality efforts, through more-effective approaches. This increases the need for solutions that are well-integrated across the application life cycle, not only during the development cycle but also into production.</p> <p>Emerging Trends and Architectural Directions:</p> <p>Requirements for testing products have changed from testing the product in isolation to integrating the testing with the rest of the product’s life cycle, and to support collaboration across the QA team and among the entire project team. Therefore, IT organizations should focus on testing workflow and quality management issues across the organization when selecting a set of tools.</p>	A02.022.245	Application Components > Development Environment and Tools > Validation Tools	Software tools that check web pages for accessibility and syntactical correctness of code.	<p>Automated Load/Stress Testing:</p> <ul style="list-style-type: none"> • Mercury LoadRunner (Hewlett Packard) <p>Requirements Management/Traceability:</p> <ul style="list-style-type: none"> • Mercury Quality Center (Hewlett Packard) <p>Defects Tracking:</p> <ul style="list-style-type: none"> • Mercury Quality Center (Hewlett Packard) • Seapine Software TestTrack Professional • Team Foundation Suite • Visual Studio Team Suite <p>Accessibility Validation and Repair:</p> <ul style="list-style-type: none"> • HiSoftware AccRepair • HiSoftware AccVerify • HiSoftware Compliance Sheriff <p>Application Security Assessments:</p> <ul style="list-style-type: none"> • Hewlett Packard WebInspect 	<p>Effective: 2/18/2009</p> <p>Revised: 2/16/2011</p> <p>Reviewed: 6/17/2015</p>

EAS Code	EAS Category Name	Standard	KITS Category Code	KITS Domain > Area > Category	KITS Description	Approved Products	Date
----------	-------------------	----------	--------------------	-------------------------------	------------------	-------------------	------